UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,110	01/10/2002	Shin Saito	09792909-5308	8060

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EXAMINER
WONG, WARNER

ART UNIT	PAPER NUMBER
2668	

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/044,110	SAITO, SHIN
	Examiner	Art Unit	
	Warner Wong	2668	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 January 2002*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

1.   Page 27, lines 5-6: The statement "The data packet thus reaches the terminal 3

routing through an optimal path" lacks supporting description.

2.   Page 34, line 11: The word 'not' in the statement "When it is determined in step

34 that the network prefix acquired in step 33 is **not** identical.. steps S35 through

S37 are skipped" is inconsistently/incorrectly added according to the rest of the

specification description as well as fig. 10.   Hence, the word 'not' should be

removed.

3.   Page 36, lines 19-21: The specification which is describing figure 10 is missing

the corresponding step S43.

Claim Objections

The following claims are objected to because of the following informalities:

1.   Claim 1, line 1: The limitation "An apparatus" is being referred to as "said

information processing apparatus" cited on claim 1, lines 5-6 & lines 13-14 as well as

other depending claims. For consistency, it should be reworded to "An information

processing apparatus".

2.   Claim 2, lines 3-5: The limitation "fourth position information of said information

processing apparatus" is contradictory to the description "The fourth position information

representing the current position of the partner information processing apparatus" on p.

45, lines 13-15 of the specification.

3.   Claim 2, lines 5-6: The limitation "fifth position information of said another

information processing apparatus" appears to be contradictory to the description "fifth

position information representing the current position of the information processing

apparatus" on p. 11, lines 10-13 of the specification.

In addition, the limitation "fifth position information" is not found in the "Preferred

Embodiments of the Invention" section of the specification for a better understanding of

the invention. The "Summary of the Invention" section appears to be a verbatim of the

independent claims description and hence also did not facilitate the comprehension of

the limitation "fifth position information".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act
of 1999 (AIPA) and the Intellectual Property and High Technology Technical
Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting
directly or indirectly from an international application filed before November 29, 2000.
Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior
to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5.   Claims 1-9, 11-21 and 23-25 are rejected under 35 U.S.C. 103(a) as being

unpatentable over

Regarding claims 1 and 11-13, Ishiyama describes an apparatus/method/

computer with storage medium executing software/software program (col. 15, lines 7-

35):

storage means for storing first position information representing an initial position

of said information processing apparatus (col. 8, lines 50-54, where the information

processing apparatus [hereinafter referred to as the "local mobile"] stores its COA1 =

initial position), and second position information representing an initial position of said

another information processing apparatus when communication is established with said

another information processing apparatus (fig. 7, where the "another information

processing apparatus" [hereinafter referred to as the "remote mobile"] is also another

mobile. In this case, when communication between the apparatuses is established, the

local mobile will receive from the remote mobile a message #2 of fig. 7 containing

COA1, the initial position of "another information processing apparatus");

receiver means for receiving data from said another information processing

apparatus (fig. 7, where remote mobile data is received by the local mobile);

acquisition means for acquiring third position information representing a current

position of said information processing apparatus (col. 8, lines 50-58, where the local

mobile acquires COA2 = current position similarly to that of COA1 described on col. 8,

lines 36-38).

first determining means for determining whether the third position information

acquired by said acquisition means corresponds to the first position information stored

in said storage means (col. 8, lines 55-58, where the local mobile determines that the

position information of its COA2 is different than COA1).

authenticator means for authenticating the data received by said receiver means,

based on a result of determination provided by said first determining means (col. 10,

lines 15-25, where the IPsec module checks if the security association derived from the

security policy is the one used in processing the received packet).

Regarding claims 14 and 23-25, Ishiyama describes an apparatus/method/

computer with storage medium executing software/software program program (col. 15,

lines 7-35):

storage means for storing first position information representing an initial position

of said information processing apparatus (col. 8, lines 50-54, where the information

processing apparatus [hereinafter referred to as the "local mobile"] stores its COA1 =

initial position), and second position information representing an initial position of said

another information processing apparatus when communication is established with said

another information processing apparatus (fig. 7, where the "another information

processing apparatus" [hereinafter referred to as the "remote mobile"] is also another

mobile. In this case, when communication between the apparatuses is established, the

local mobile will receive from the remote mobile a message #2 of fig. 7 containing

COA1, the initial position of "another information processing apparatus");

first acquisition means for acquiring third position information representing a

current position of said information processing apparatus (col. 8, lines 50-58, where the

local mobile acquires COA2 = current position similarly to that of COA1 described on

col. 8, lines 36-38);

first determining means for determining whether the third position information

acquired by said acquisition means corresponds to the first position information stored

in said storage means (col. 8, lines 55-58, where the local mobile determines that the

position information of its COA2 is different than COA1);

second determining means for determining whether the fourth position

information read by said reader means corresponds to the second position information

stored in said storage means (col. 8, lines 66-67 & col. 9, lines 1-4, where the remote

mobile's COA change is detected);

transmitter means for transmitting data to said another information processing

apparatus, based on results of determination provided by said first and second

determining means (col. 8, lines 55-67 & col. 9, lines 1-4, where the local mobile

updates its local COA, plus receiving a message #6 of fig. 7 from the remote mobile

indicating that the remote COA has been changed, and sends message #7 of fig. 7

comprising all the new COA's).

Regarding claim 2, Ishiyama further describes:

reader means for reading fourth position information of said information

processing apparatus, forming a destination address and fifth position information of

said another information processing apparatus, forming a source address, contained in

the data received by the said receiver means, when the result of determination provided

by said first determining means indicates that the third position information fails to

correspond to the first position information (fig. 7 & col. 8, lines 59-67 & col. 9, lines 1-4,

where the local mobile receives from the remote mobile message #6, containing a

header with (1) the local mobile's COA = fourth position [yet another moved COA

position] information for use as part of the destination address and (2) the remotes

mobile's COA = fifth position information for use of as part of the source address, and

recognizes that the local mobile [itself] already has a new/changed COA);

second determining means for determining whether the fifth position information

read by said reader means corresponds to the second position information stored in

said storage means (col. 8, lines 66-67 & col. 9, lines 1-4, where the remote mobile's

COA change is detected).

Regarding claim 3, Ishiyama further describes substituting means for

substituting the first position information with the fourth position information when the

result of determination provided by said first determining means indicates that the third

position information fails to correspond to the first position information (col. 8, lines 59-

63, where the local mobile substitute its memory holding its COA address with yet

another changed COA2' address, i.e. COA1 -> COA2 -> COA2');

Regarding claim 15, Ishiyama further describes substituting means for

substituting the first position information with the third position information when the

result of determination provided by said first determining means indicates that the third

position information fails to correspond to the first position information (col. 8, lines 59-

63, where the local mobile substitute its memory holding its COA1 address with the

COA2 address, i.e. COA1 -> COA2);

Regarding claims 4 and 16, Ishiyama further describes substituting means for

substituting the second position information for the fifth position information when the

result of determination provided by said second determining means indicates that the

fifth position information fails to correspond to the second position information (col. 8,

lines 66-67 & col. 9, lines 1-4, where the remote mobile's new COA change is detected

upon receiving the message and is used).

Regarding claims 5 and 18, Ishiyama further describes that the fourth position

information is assigned to a portion of the most significant bits (MSB) of the destination

address (fig. 7 & col. 8, lines 40-42, where the illustrated packet to the local mobile &

RFC2002 indicates that the COA resides at the MSB of the destination addressing set

of [COA + destination address]).

Regarding claims 6 and 19, Ishiyama further describes that the fifth position

information is assigned to a portion of the most significant bits of the source address

(fig. 7 & col. 8, lines 40-42, where the illustrated packet from the remote mobile &

RFC2002 indicates that the COA resides at the MSB of the source addressing set of

[COA + source address]).

Regarding claim 7, Ishiyama further describes that the authenticator means

uses the first and second position information to authenticate the data received by said

receiver means (col. 9, lines 47-49, where RFC2401 is incorporated & defines IPsec,

and col. 10, lines 15-25, where when a packet is received, IPsec specifies the use of

destination address 'dst' to determine the security association SA, and searches the

SPD where each entry may map to a source address RFC2401 section 4.4.1).

Regarding claims 8 and 20, Ishiyama further describes the notifying means for

notifying an information storage device connected to said network of the fourth/fifth

position information representing the current position of said information processing

apparatus, and identification information identifying said information processing

apparatus, when said information connected to another network (col. 9, lines 11-13,

where the mobile sends to the DNS = information storage device an update message

containing its current COA [of another network]).

Regarding claims 9 and 21, Ishiyama further describes that the identification

information is a terminal identifier identifying said information processing apparatus over

said network (col. 9, lines 11-13, where the update message includes it's source

address = terminal identifier).

Regarding claim 17, Ishiyama describes:

the transmitter means sets, at a source address, the third position information

acquired by said first acquisition means, sets, at a destination address, the fourth

position information acquired by said second acquisition means, and transmits the data

(col. 8, lines 55-67 & col. 9, lines 1-4, where the local mobile updates its local COA, plus

receiving a message #6 of fig. 7 from the remote mobile indicating that the remote COA

has been changed, and sends message #7 of fig. 7 comprising all the new COA's).

Ishiyama further describes that the packets are IP (col. 7, lines 7-14), which

inherently performs:

calculating means for calculating additional information, to be added to the data,

from the first and second position information stored in said storage means and adding

means for adding said additional information calculated by said calculating means to the

data, to which the additional data has been added by said adding means (IP protocol

inherently calculates checksum [additional information] of source and destination

address to be added to the header portion of data);

6.   **Claims 10 and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable

over Ishiyama as applied to claims 1 and 14 above respectively, and further in view of

Karighattam (6,594,776).

Ishiyama fails to describe reset means for resetting the first and second position

information stored in said storage means when communication with said another

apparatus is disconnected (col. 2, lines 25-29, where the switch = storage means and

its address table containing MAC addresses [= COA/routing address information] for IP

packets are resetted) for the purpose of further enhancing network link availability.

It would have been obvious to one with ordinary skill in the art at the time of

invention by applicant to reset the routing (COA) position information of Ishiyama as in

the system of Karighattam. The motivation is that it further enhances network link

availability (Karighattam, col. 1, lines 57-58 & col. 2, lines 13-19).

Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure: Asokan (6,959,009), Teraoka (6,895,007), Shitama
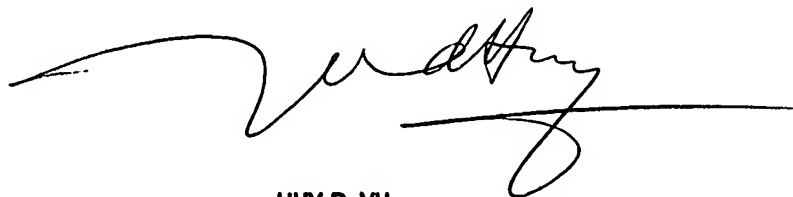
(2002/0126642) and Shitama (2002/0099856).

        Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Warner Wong whose telephone number is 571-272-
8197. The examiner can normally be reached on 5:30AM - 2:00PM, M-F.
        If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the
organization where this application or proceeding is assigned is 571-273-8300.
        Information regarding the status of an application may be obtained from the
Patent Application Information Retrieval (PAIR) system. Status information for
published applications may be obtained from either Private PAIR or Public PAIR.
Status information for unpublished applications is available through Private PAIR only.
For more information about the PAIR system, see http://pair-direct.uspto.gov. Should
you have questions on access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).

Warner Wong
Examiner
Art Unit 2668

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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600